1. Problem Description

In Linux, the used Clock ticks per process are stored. Various application may measure CPU utilization by using these data.

To do this, we assume the data type as follows. Each data contains four values. The first value is the application name. The second and third value represents the start and end time (in seconds). The last value is a cumulative Clock ticks at the given duration.

First line of input data is the specific time. This time is the base for calcuating the CPU utilization. Following the second line, there are stored used Clock tick.

1) First example

10
Browser 10 11 30
System 10 11 20
idle 10 11 20

The above data depicts a CPU Clock between sec. 10 and sec. 11.
The amount of CPU utilization of Browser can be calculated as follows:

(30 / (30+20+20)) * 100 = 42.9%

2) Second Example

10
Browser 10 13 30
System 8 11 15
Idle 9 19 100

We can calculate the CPU utilization of Browser at sec. 10 as follows:

((30/3) / ((30/3) + (15/3) + (100/10))) * 100 = 40%

When data are given as follows, implement a program which calcuate CPU utilization for each process at the given time and show the result by descending order.

I/O is from a file.

2. Input Data

9 11
Browser 10 13 90
Music 8 11 30
Idle 9 19 100

3. Output Data

9
Idle 50%
Music 50%

11
Browser 75%
Idle 25%

4. Output Rule

- CPU utilization must round up to two decimal places.(ex. 19.591 -> 19.6)
- If CPU utilization is the same, then Program name is used in sorting.